

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 2002CH011	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/IB 03/05096	International filing date (<i>day/month/year</i>) 11.11.2003	Priority date (<i>day/month/year</i>) 13.11.2002
International Patent Classification (IPC) or both national classification and IPC C09B29/00		
Applicant CLARIANT INTERNATIONAL LTD et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 30.03.2004	Date of completion of this report 25.11.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Härtinger, S Telephone No. +49 89 2399-8289 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/IB 03/05096

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

Description, Pages

1-33 as originally filed

Claims, Numbers

1-10 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

1. The invention relates to mono azo dyestuffs of the formula (I) according to claims 1-5, certain matter comprising the same (claims 6, 9-10) and the use of the same for dyeing (claims 7-8).

The relevant prior art has been cited in the European search report.

D1: DE-A-34 33 957; D2: JP-A-2002 309117; D3: EP-A-0 331 170;
D4: GB-A-1 413 315; D5: FR-A-2 387 267; D6:CH-A-584 747.

2. The claimed compounds represent a selection of what has been disclosed in D1 (cf. page 2 and group K in the meaning of the first formula given in line 15), D2 (cf. claim 1 and formula (1)), D3 (cf. formula (I) and claim 1) and D4 (cf. claim 1). However, in view of the proviso at the end of present claim 1, all of the specifically individualised embodiments of the prior art, have been excluded from the scope of the claim. Hence, the present compounds are considered to represent a novel selection with respect to D1-D4. As to D5, the amino pyrazole coupling component has not been individualised. As to D6, the benzothiazole component is absent.

In view of the above, the claimed matter appear to have met the novelty requirement of Art. 33(2) PCT.

3. Inventive step:

The technical problem underlying the invention is regarded to be the provision of dyestuff which is suitable for ink jet applications. D1 to D4 represent the most pertinent prior art. Starting from these documents, the skilled person is aware that the products obtained from the coupling of the 2-amino-benzothiazol with the N-phenyl-3-methyl-5-amino-pyrazoles result in valuable dyestuffs, since both components are well established coupling components. Thus, it is readily seen from D3, D4 and D6 that pyrazoles, which are substituted at the N-phenyl moiety, do not alter the colorant properties. Likewise, it is seen from D3, that the 3-methyl group sticking to the pyrazole ring may be altered, such that the compound 17 of D3 is an obvious equivalent to a compound falling under the present claim. That is to say the replacement of the ethyl group in the said compound 17 through a methyl group is an obvious further embodiment of what has already been specifically disclosed in D3. Likewise, starting from the substituted pyrazoles coupling components of D3, D4 and D6 the skilled person would have expected the coupling products with 2-amino-benzothiazoles to be likewise suitable dyestuffs, all the more as D5 stipulates that the coupling with ordinary amino-pyrazoles result in this kind of dyestuff (see page 1, lines 5-20). It is therefore not

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feasible in how far the present proviso, which renders the claims novel, could also contribute to the inventiveness of the presently selected products. In the absence of any technical effect, which immediately is contributable to the selected portion (i.e. the requirement of R5-R9 having at least one non-hydrogen substituent), the claimed matter does not appear to meet the requirements of Art. 33(3) PCT.